

2.0 REGIONAL CONTEXT RISK-BASED END STATE DESCRIPTION

2.1 Physical and Surface Interface

The ORR is located in east Tennessee in the central portion of the Southern Appalachian region. East Tennessee includes portions of three of the distinct physiographic regions that make up the Southern Appalachian region: the Blue Ridge Mountains, the Valley and Ridge Physiographic Province, and the northern portions of the Cumberland Plateau. The ORR lies within the western portion of the Valley and Ridge Province, a rolling to hilly terrain marked by long linear ridges and drained by the Tennessee River. The ridge and valley topography provides security and isolation for the site but also constrains the land use because of moderate to severe slopes.

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isolation for the site but also constraints the area due to because of inadequate soil cover.

Figure 2.0 depicts the location of the ORR in relation to surrounding counties within east Tennessee.

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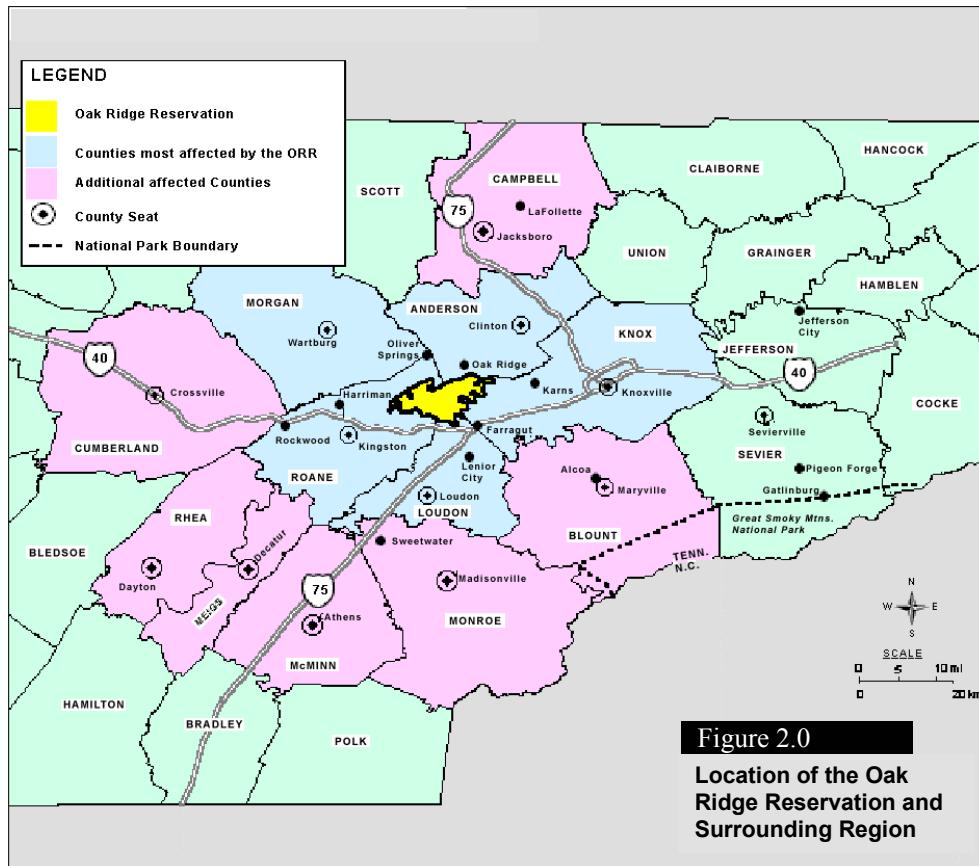
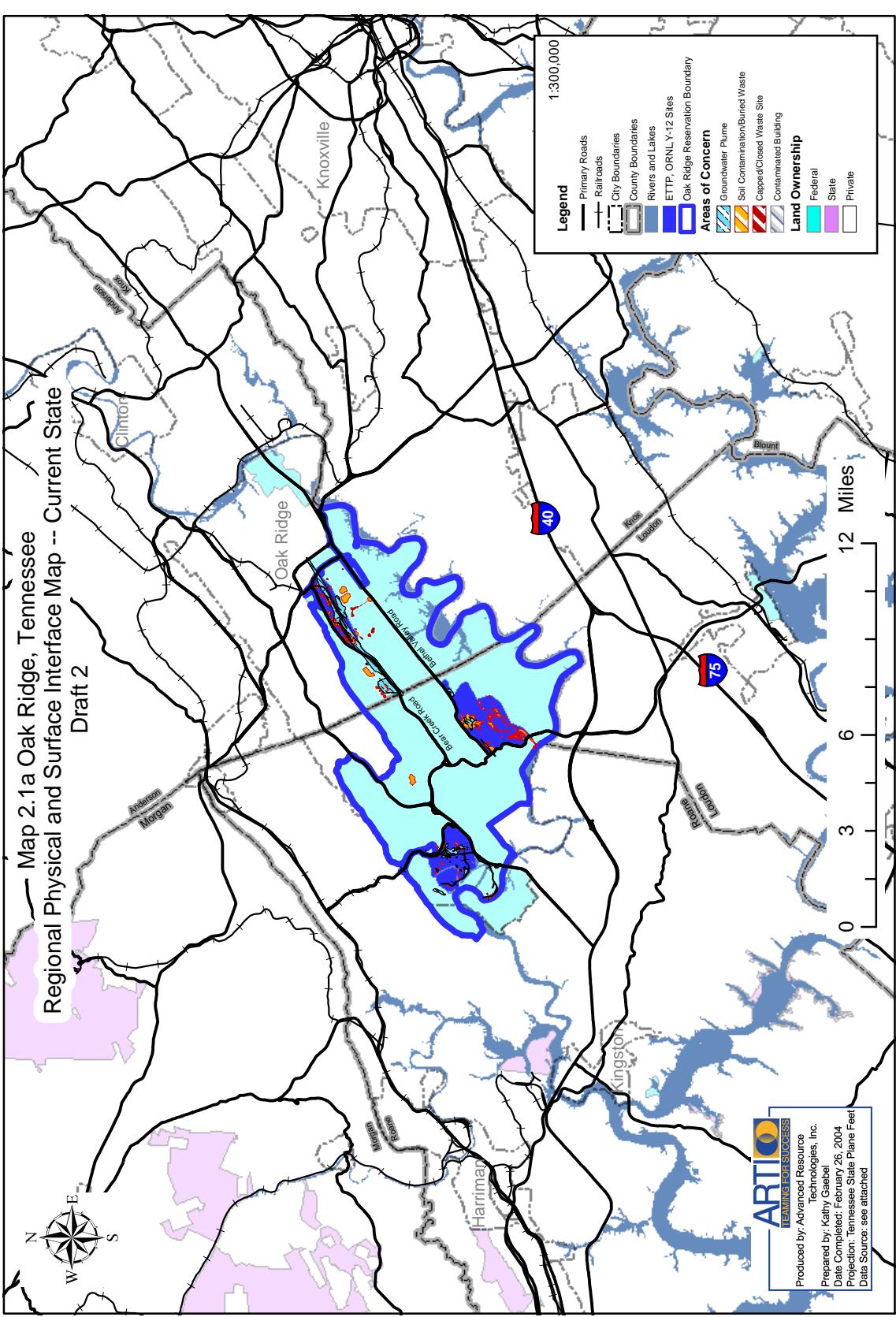
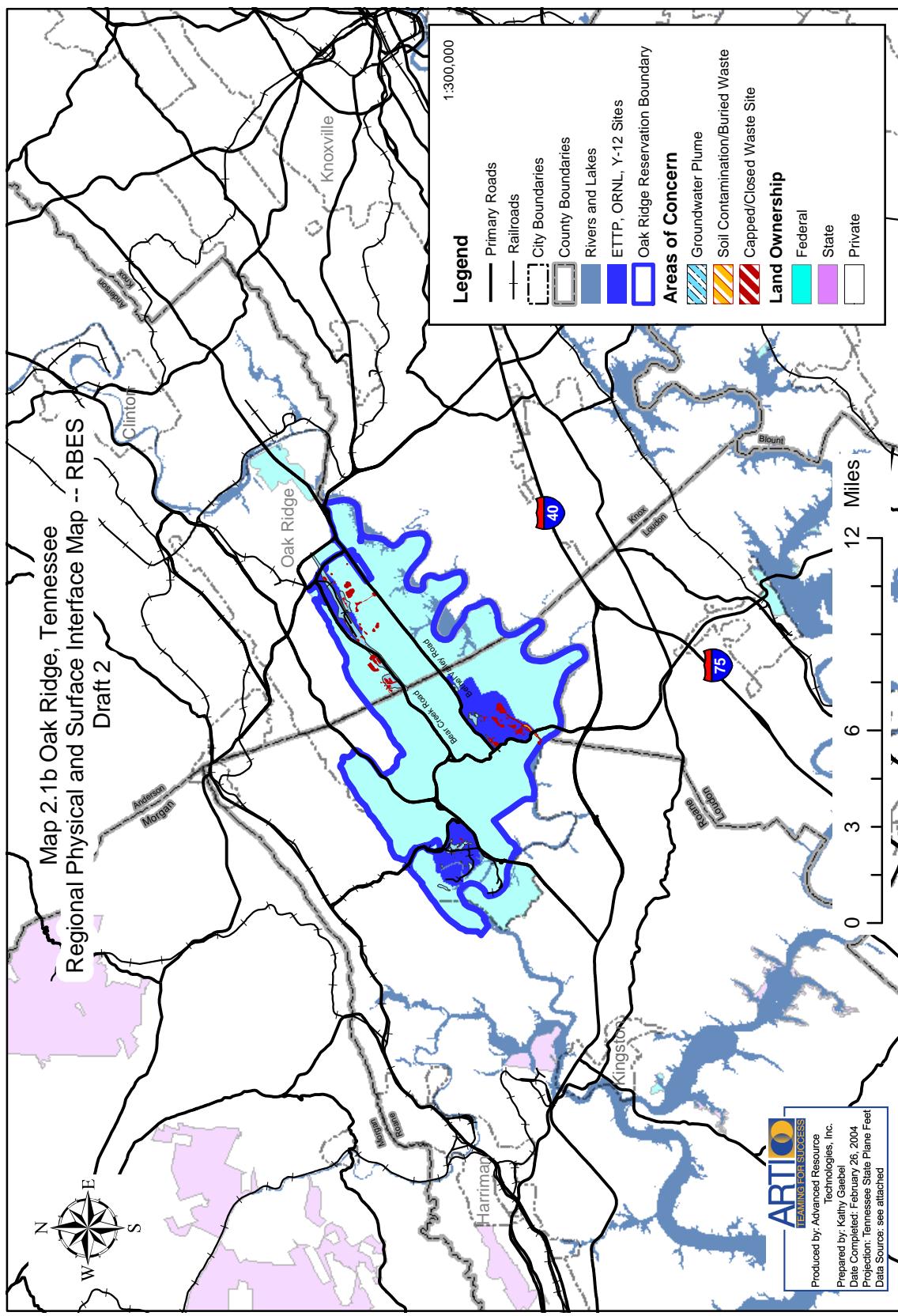


Figure 2.0

Location of the Oak Ridge Reservation and Surrounding Region





ARTIQ TEAMING FOR SUCCESS
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The Southern Appalachian region is recognized as one of the most biologically diverse temperate areas in the United States, hosting more than 20,000 species of plants and animals. The ORR forms an important part of this ecosystem because of its relative isolation from widespread impacts since its formation in the 1940s. While other areas of the Valley and Ridge Province became increasingly developed and impacted by a growing population, most of the ORR remained undeveloped. The National Environmental Research Park within the ORR is a major component of the Southern Appalachian Biosphere Reserve. The Great Smoky Mountains National Park also is part of the Southern Appalachian Biosphere Reserve.

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Figures 2.2a and 2.2b depict the human and ecological land use features of the region surrounding the ORR under current conditions and RBES conditions, respectively. No differences between the current and RBES conditions outside the ORR have been identified.

